## BRITISH EMPIRE CANCER CAMPAIGN RESEARCH UNIT IN RADIOBIOLOGY

Director:
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## MOUNT VERNON HOSPITAL AND THE RADIUM INSTITUTE NORTHWOOD, MIDDLESEX

Telephone: Northwood 3281

20th March 1957

Miss Rosalind Franklin, Birkbeck College Crystallography Laboratory, 21 Torrington Square, London, W.C.1.

Dear Miss Franklin,

Thank you for your letter of March 14th. I wondered if you might be interested in attempting a direct measurement of the dose received by your crystal. At dose levels of 5 10 r irradiated perspex develops absorption bands and if a suitable wave length is chosen in one of these bands the extinction coefficient is proportional to dose. My colleague Dr. Boag has collaborated with Professor Rotblat and others at St. Bartholemew's Hospital in developing this method of dosimetry. If you care to expose any or all of the enclosed specimens of perspex, normally to your x-ray beam, and return them to me, Dr. Boag will examine their absorption spectrum and may be able to give you some information regarding the dose which they have received. On the basis of these tests you would know whether you were interested in making further measurements, in which case Dr. Boag would be pleased to give you full information. The method is being written up but is not yet in print.

Yours sincerely,

LHG/WAC

Dr. L. H. Gray.